

PATENT
USSN 09/721,506
002616US; 018-210c

REMARKS

This paper is responsive to the Office Action dated August 30, 2004, which has been made final.

Claims 75-78, 83-86, 91-94, and 101-104 have been variously amended and are under examination. Claims 73, 80, 81, 88, 89, and 96 are withdrawn from examination, but subject to a Request for Rejoinder indicated below.

Enclosed herewith is a Notice of Appeal to extend the pendency of the application, so that the Examiner can consider the amendments and remarks presented here.

Further consideration and allowance of the application is respectfully requested.

Specification

Applicants understand the blanket incorporation statement on page 268 of the application has been interpreted by the Examiner not to have any effect towards fulfilling, either in part or in whole, the enablement, written description, or best mode requirements of 35 USC § 112 ¶ 1.

By way of this amendment, this statement has now been deleted. The invention is fully described and enabled, and the best mode is fully disclosed in the specification as filed, in the context of what was generally known in the art at the time of filing, without relying on the cancelled paragraph.

Fragments and variants

Explicit reference to fragments and variants was removed from base claims 75, 83, and 91 in the Amendment filed May 14, 2004. The Office Action points out that claims 84 and 92 as previously presented still explicitly referred to fragments and variants, creating potential issues for claims 83-86 and 91-94 under the written description requirement of 35 USC § 112 ¶ 1, § 112 ¶ 2; § 101; § 102 over a published article (Rhyu et al., J. Nat. Cancer Inst. 87:12, 1995); and the doctrine of obviousness-type double patenting over U.S. Patent No. 6,093,809.

Applicants apologize for this oversight. Claims 84 and 92 have now been amended to bring them into line with the other claims. Withdrawal of these rejections is respectfully requested.

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Other rejections under 35 USC § 112:

The claims under examination stand rejected under § 112 ¶ 2 for being unclear as to the size or length of the region to which the defined percent of identity in base claims 75, 83, and 91 is to be observed.

These claims have now been amended to state that the amino acid sequence encoded by the claimed polynucleotide is 80% or 90% identical to *the full length of SEQ. ID NO:2*. The skilled reader will understand this to mean that 80% or 90% of the amino acids appearing in SEQ. ID NO:2 must be within the encoding region of the claimed polynucleotide in the same order. The degree of identity can easily be determined using the BLAST algorithm (available through the NCBI website), which is referred to in the text in over 10 instances as a preferred analysis tool. The amended claims meet the definiteness requirements of § 112 ¶ 2.

Rejection is also made with respect to what percent identity the claimed nucleic acid needs to have to the complement. Base claims 75, 83, and 91 are now amended to indicate explicitly that the claimed polynucleotide contains the encoding sequence defined in the claim, or its *exact* complement.

Withdrawal of these rejection is respectfully requested.

Terminal Disclaimers:

Claims 75-78, 83-86, and 91-94 stand rejected for obviousness-type double patenting with respect to claims 1-8 of U.S. Patent No. 6,475,789, claims 3-10 of U.S. Patent No. 6,261,836, and claim 1 of U.S. Patent No. 6,093,809.

The subject matter claimed in the '809 patent relates to a telomerase protein of a single-celled ciliate, and does not meet the identity requirements of the invention claimed here. Accompanying this response is an Appendix showing a BLAST search between SEQ. ID NO:2 ("QUERY") referred to in the present claims, and translated SEQ. ID NO:1 ("SBJCT") claimed in the '809 patent. The algorithm found a significant match over less than 500 amino acids, within which there was only 23% identity. Thus, the degree of identity over the full length of SEQ. ID NO:2 is less than 23% — well below the 80% identity required in the claim.

Under separate cover, applicants will file Terminal Disclaimers with respect to U.S. Patent Nos. 6,475,789 and 6,261,836.

Applicants will also voluntarily file a Terminal Disclaimer with respect to USSN 10/054,295, for which the issue fee has been paid.

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Other related applications:

Applicants wish to remind the Examiner that there are other pending U.S. Patent applications and issued patents that are related to this one. They include the following:

- Issued patents claiming inventions related to TRT from single celled ciliates are U.S. Patent Nos. 6,093,809; 6,166,178; and 6,309,867.
- Issued patents claiming inventions related to hTRT are U.S. Patent Nos. 6,261,836; 6,337,200; 6,444,650; 6,475,789; 6,610,839; 6,617,110; 6,627,619; and 6,808,880.
- Allowed applications claiming inventions related to hTRT are USSN 09/843,676 and 10/054,295.
- Other pending applications claiming inventions related to hTRT include USSN 08/974,584; 09/432,503; 09/438,486; 09/721,477; 09/721,506; 09/990,080; 10/044,539; 10/044,692; 10/053,758; 10/054,611; 10/637,443; 10/877,022; 10/877,124; and 10/877,146.

Request for Rejoinder:

Claims 80, 88, and 96 (Group V) are method claims that depend from and incorporate the limitations of product claims in the elected group (Group I).

Applicants renew the request made on November 6, 2003, and May 14, 2004, that these claims (and all other method claims depending from product claims in the elected group) be rejoined into the group under examination, upon determination that the product claims are patentable, in accordance with MPEP § 821.04.

Applicants also renew the request made on May 14, 2004, that claims 73, 81, and 89 (Group I) be rejoined into the group under examination. These are claims to TRT protein defined in the same manner as the TRT protein referred to and encoded by claims 75, 83, and 91. In order to determine that the polynucleotides of the elected group are free of prior art, the Office has already searched SEQ. ID NO:2. Rejoinder of Group I into the group under examination was made in the response filed November 6, 2003.

MPEP § 803 prohibits the Office from restricting different embodiments of an invention where there would be no burden on the Examiner to examine the claims together — irrespective of whether the embodiments are patentably distinct. This application claims priority to USSN

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08/854,050, which issued as U.S. Patent 6,261,836 on July 17, 2001. Since the claims in Groups I and II have already been fully searched in both the priority and the instant application, it imposes no burden to have them rejoined together into the group under examination.

Rejoinder and allowance of all pending claims in the application is respectfully requested.

Request for Interview

Applicants respectfully request that all outstanding rejections be reconsidered and withdrawn. The application is believed to be in condition for allowance, and a prompt Notice of Allowance is requested.

In the event that the Examiner determines that there are other matters to be addressed, applicants hereby request an interview by telephone.

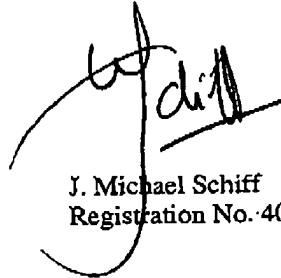
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Fees Due

Authorization is enclosed for charging the Deposit Account for the fees for the extension of time. No other fees are believed payable with respect to the filing and consideration of this paper and the accompanying documents.

Should the Patent Office determine that a further extension of time or any other relief is required for further consideration of this application, applicant hereby petitions for such relief, and authorizes the Commissioner to charge the cost of such petitions and other fees due in connection with the filing of these papers to Deposit Account No. 07-1139, referencing the docket number indicated above.

Respectfully submitted,



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